

COMPLETE LISTING OF CLAIMS**IN ASCENDING ORDER WITH STATUS INDICATOR**

Claims 1-23 (Canceled)

24. (Currently Amended) A process for producing lactoferrin which comprises culturing a transformant eucaryotic cell containing a recombinant plasmid, said plasmid comprising a plasmic vector having a polydeoxyribonucleotide which codes for a lactoferrin proteins in a suitable nutrient medium until the lactoferrin protein is formed and isolating the ~~human~~-lactoferrin protein.

Claims 25-29 (Canceled)

30. (Currently Amended) A method for producing biologically active recombinant lactoferrin comprising the steps of:

combining sequences containing a selectable marker gene, a promotor, a transcription termination sequence, and a linker sequence;

cloning said sequences to form a plasmid;

digesting said plasmid with a restriction endonuclease;

inserting a cDNA coding for human, bovine or porcine lactoferrin into a restriction site; and

transforming a cells with said plasmid ~~and the cell expressing to produce said recombinant lactoferrin eDNA.~~

31. (Original) The method of Claim 30, wherein said selectable marker gene is selected from the group consisting of pryr4, pyrG, andS, argB and trpC.

32. Canceled

33. (Original) The method of Claim 30, wherein said promotor is selected from the group consisting of alcohol dehydrogenase, argB, α -amylase, glucoamylase, alcohol dehydrogenase and benA.

34. (Original) The method of Claim 30, wherein said transcription termination sequence is selected from the group consisting of α -amylase, glucoamylase, alcohol dehydrogenase and benA.

35. (Original) The method of Claim 30, wherein said linker sequence is selected from the group consisting of α -amylase, glucoamylase and lactoferrin.

Claims 36-57 (Canceled)

58. (Currently Amended) A method for producing biologically active recombinant lactoferrin comprising the steps of:

combining sequences containing a selectable marker gene, a promotor, a transcription termination sequence, and a linker sequence;

cloning said sequences to form a plasmid;

digesting said plasmid with a restriction endonuclease;

inserting a substitution analog of a cDNA sequence selected from the group consisting of SEQ. ID No. 1, 3, and 5 into a restriction site; and transforming eucaryotic cells with said plasmid expressing lactoferrin cDNA which produces said recombinant lactoferrin.

59. The method of Claim 58, wherein said selectable marker gene is selected from the group consisting of pyr4, pyrG, andS, argB and trpC.

60. Canceled

61. (Currently Amended) A ~~product~~ recombinant lactoferrin produced by the method of Claim 58.

62. The method of Claim 58, wherein said promotor is selected from the group consisting of alcohol dehydrogenase, argB, α -amylase, glucoamylase, and benA.

63. The method of Claim 58, wherein said linker sequence is selected from the group consisting of α -amylase, glucoamylase,, alcohol dehydrogenase and benA.

64. The method of Claim 58, wherein said linker sequence is selected from the group consisting of α -amylase, glucoamylase, and lactoferrin.

Claims 65-68 Canceled.